APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,736	06/01/2001	John K. Overton	10406/49	3927

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BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, IL 60610

EXAMINER
DELGADO, MICHAEL A

ART UNIT	PAPER NUMBER
2144	

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/872,736	OVERTON ET AL.
	Examiner	Art Unit	
	Michael S. A. Delgado	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 January 2005</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-45</u> is/are pending in the application.
    4a) Of the above claim(s) <u>1-23</u> is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>24-45</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on <u>14 September 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some *   c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date 9/04, 8/02, 05/02 09/01
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 24-26, 29-38 and 40-45 rejected under 35 U.S.C. 102(e) as being anticipated by

US Patent No. 6,466,980 by Lumelsky et al.

In claim 24, Lumelsky teaches about a method of scaling at least one of location server

capacity and transaction rate capability in a system for storing and retrieving location

information, the method comprising (Fig 4) (abstract) :

providing a transfer protocol configured to transport identifier and location

information, the location information specifying the location of information relevant to the

identifier (Col 9, lines 15-20) (Col 9, lines 20-30);

providing a first location server storing location information formatted

according to the transfer protocol (Col 9, lines 20-25);

receiving an identifier and a location relevant to the identifier at the first

location server (Col 9, lines 20-25);

storing the received location in a location store at the first data location server, the

location store comprising a plurality of identifiers, each identifier associated with at least one

location, wherein the received location is associated with the received identifier in the location

store (Fig 6) (Col 9, lines 35-45); and

transferring a portion of the identifiers and associated locations to a second data location

server when a performance criterion of the first location server reaches a predetermined

performance limit (Col 6, lines 33-43).

In claim 25, Lumelsky teaches about a method of claim 24, wherein receiving an

identifier and a location comprises receiving the identifier and the location at the first location

server from an application server, wherein the location comprises an address for the application

server (Col 9, lines 50-60).

In claim 26, Lumelsky teaches about a method of claim 24, wherein receiving an

identifier and a location comprises receiving the identifier and the location at the first location

server from a physical object, wherein the identifier identifies the physical object and wherein

the location comprises a geographic location for the physical object (Col 10, lines 10-30).

In claim 29, Lumelsky teaches about a method of claim 24, wherein transferring a portion

of the identifier and location associations comprises:

identifying a portion of identifier and location associations on the first location server to

be transferred to the second location server and identifying a data set state of the identified

portion at an initial time (Col 24, lines 10-20);

copying a data set for the identified portion corresponding to the identified

data set state from the first location server to the second location server and maintaining a second

data set containing changes to the identified portion since the initial time (Col 24, lines 10-20);

identifying a data set state for the second data set (Col 24, lines 19-23);

ceasing operation of the first location server with respect to the identified portion and

copying the second data set to the second location server, wherein the second data set

corresponds to the identified data set state for the second data set (Col 20, lines 20-30) (Col 24,

lines 10-20); and

initiating operation of the second location server for the identified portion of identifiers

and location associations (Col 24, lines 10-20).

In claim 30, Lumelsky teaches about a method of claim 24, wherein the performance

criterion comprises an amount of available persistent storage space in the first location server

(Col 19, lines 40-45).

In claim 31, Lumelsky teaches about a method of claim 24, wherein the performance

criterion comprises a transaction rate limit (Col 1, lines 45-55) (Col 10, lines 47-56).

In claim 32, Lumelsky teaches about a method of claim 24, wherein the transaction rate

limit comprises a processor speed limit (Col 1, lines 45-55) (Col 10, lines 47-56).

In claim 33, Lumelsky teaches about a method of claim 24, wherein the transaction rate

limit comprises a network connection bandwidth limit (Col 1, lines 45-55) (Col 10, lines 47-56).

In claim 34, Lumelsky teaches about a method of claim 24, further comprising

transmitting a location server map from the first location server, the location server map

comprising information identifying the second location server and a list of identifiers associated

with the second location server (Fig 6) (Col 10, lines 20-30).

In claim 35, Lumelsky teaches about a method of claim 34, wherein the first and second

location servers are part of a location server cluster comprising a plurality of location servers,

and wherein transmitting the location server map comprises transmitting the location server map

to each of the plurality of data location servers asynchronously (Fig 4) (Col 10, lines 35-45).

In claim 36, Lumelsky teaches about a method of claim 34, wherein transmitting a

location server map comprises transmitting the location server map to a client in response to

query received at the first location server from the client regarding an identifier that is not

resident on the first location server (Col 24, lines 1-10).

In claim 37, Lumelsky teaches about a method of claim 24, wherein transferring a portion

of the identifiers and associated locations to a second location server when a performance

criterion of the first data location server reaches a predetermined performance limit further

comprises monitoring the performance criterion and automatically transferring the portion of

identifiers and associated locations when the first location server reaches the predetermined limit

(Col 24, lines 10-20).

In claim 38, Lumelsky teaches about a database comprising;

a computer readable medium (Col 28, lines 20-25);

a plurality of index designations, each index designation representative of one of a

plurality of identifiers, wherein each identifier uniquely identifies an entity (Fig 6) (Col 9, lines

35-45);

a plurality of locations, wherein each of the locations is associated with at least one of the

plurality of index designations and represents a location of information relevant to an identifier

represented by an index designation (Col 9, lines 35-45);

a location store stored in the computer readable medium, the location store comprising a

table containing the plurality of index designations and associated locations (Fig 6); and

an indexing function stored in the computer readable medium, the indexing function

operative to map each of the plurality of identifiers to a respective one of the plurality of index

designations (Col 9, lines 35-45).

In claim 40, Lumelsky teaches about a database of claim 39, further comprising a front

end in communication with the location store and indexing function, the front end operative to

transport identifiers and associated locations via a transport protocol (Col 9, lines 15-25).

In claim 41, Lumelsky teaches about a database of claim 40, further comprising a buffer

in communication with the front end, the buffer configured to maintain a log of each of a

plurality of location store update transactions (Col 10, lines 20-30).

In claim 42, Lumelsky teaches about a database of claim 38, wherein the computer

readable medium comprises at least one of RAM and a persistent storage device (Col 28, lines

20-30).

In claim 43, Lumelsky teaches about a database of claim 38, wherein the location store

comprises a string store and wherein the plurality of locations comprise network address strings

(Fig 6a).

In claim 44, Lumelsky teaches about a database of claim 43, wherein at least one of the

network address strings comprises an address of a database in a network (Fig 6b).

In claim 45, Lumelsky teaches about a system for managing location information and

providing location information to location queries, the system comprising (Fig 4):

a location server operating in accordance with a transfer protocol, the

transfer protocol comprising instructions for manipulating an identifier and at least one

location associated with the identifier, wherein the identifier uniquely specifies an entity

and wherein each location specifies a location of data in a network pertaining to the

entity, the location server containing location information corresponding to at least one

entity and formatted according to the transfer protocol, and wherein the location of data

for the location comprises an application server in communication with the network (Col 9, lines

15-20) (Col 9, lines 20-30); and

programming logic stored on the location server responsive to a location

query identifying a desired entity to return a location message, the location message

comprising all locations associated with the desired entity, wherein the location server

returns the location message if the location server contains location information for the

desired entity (Col 10, lines 20-30).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claim 27-28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US

Patent No. 6,466,980 by Lumelsky et al in view of US Patent No. 6,578,068 by Bowman-

Amuah.

In claim 27 Lumelsky teaches all the limitation but fails to explicitly teach that the

physical object comprises a vehicle. In Bowman-Amuah, the advantage of a delivery vehicle is

used in the association of end-user (object) to applications (Col 23, lines 50-65).

The vehicle approach combined with the object method of Lumelsky (Col 9, lines 20-30)

would improve the portability of the software thus makes it reusable.

It would have been obvious for some one of ordinary skill at the time of the invention to

use an object comprising of a vehicle in order to take advantage of the portable feature

In claim 28, the use of a physical object comprises a portable telecommunications device is well known in the art as disclosed by Bowman-Amuah (Col 29, lines 44-50)

In claim 39, the use of an indexing function comprises a hash function is commonly used in object search and is well known in the art as disclosed by Bowman-Amuah (Col 191, lines 50-60).

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,438,652 by Jordan et al , teaches about load balancing cooperating cache servers by shifting forwarded request.

US 6,711,408 by Raith, teaches about position assisted handoff within a wireless communications network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael S. A. Delgado whose telephone number is (571) 272-3926. The examiner can normally be reached on 7.30 AM - 5.30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923

. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MD

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100